99-230208/20 A97 D25 E16 (D22) ~~CLRN 97.09.16~~
CLARIANT GMBH *DE 19740669-A1
97.09.16 97DE-1040669 *(99.03.18)* C11D 3/39, ~~A01N 37/16~~, 59/00, D06L 3/02, C07C 255/25

Coated ammonium nitrile bleach activator granules used in e.g. detergents

C99-067860

Addnl. Data: LOEFFLER M, REINHARDT G

A(12-W12A, 12-W12B) D(9-A1B, 11-B1D)

NOVELTY

A coated ammonium nitrile bleach activator granulate obtained by covering the granulate with a coating material is new.

USE

In detergents, cleaning agents, bleaches or disinfectants.

ADVANTAGE

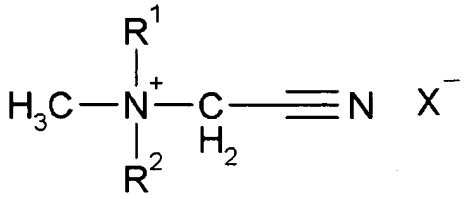
An efficient coating process is provided and the granules show good storage-stability while also giving improved retardation of peracid release.

EXAMPLE

An activator obtained by coating 500-600g trimethylammonium acetonitrile toluene sulfonate granulate (200-1600 micro m) with molten stearic acid at 80°C in a fluidized bed for 5 minutes to give a coating of 10 wt.%, followed by heat treating at 65-70°C for 5-8 minutes, gave a peracetic acid release in a test of 11%, 24% and 50% after 5, 10 and 20 minutes respectively as compared to 70, 92 and 100% for uncoated granulate and 72, 87 and 97% for coated but non-heat treated granulate.

TECHNOLOGY FOCUS

Organic Chemistry - The ammonium nitrile is of formula (I).



(I)

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R^1, R^2 = 1-4C alkyl; and
X = an anion
The uncoated granulate has a melting point of above 100°C and the coating material has a melting or softening point of 30-100°C, the granulate being heat-treated at near to the coating material melting or softening point during or after the coating process which is preferably effected in a mixer or fluidized bed apparatus to give 1-30 (especially 5-15) wt.% coating based on total wt. of coated granules. The coating material is a fatty acid, fatty alcohol, polyalkylene glycol, nonionic or anionic surfactant, polymer, wax and/or silicone and can also contain a polymer and/or (in) organic material in dissolved or suspended form. The coated granules are 0.1-2 (especially 0.3-0.8) mm in size and the original granules can contain up to 20 wt.% (in) organic acids, complex formers, ketones and/or metal complexes.
(7pp1958DwgNo.0/0)

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